

Application/Control Number: 10/716,117
Examiner: ECHELMEYER, Alix Elizabeth

IN THE CLAIMS

RECEIVED
CENTRAL FAX CENTER

DEC 04 2006

Please amend the claims of the present application under the provisions of 37 C.F.R.

§1.121(c), as indicated below:

1 (Currently amended): A lithium ion secondary battery comprising a positive electrode, a negative electrode and a solid electrolyte, said solid electrolyte being made in the form of a thin film comprising a lithium ion conductive inorganic substance , selected from the group consisting of a lithium ion conductive crystal and a lithium ion conductive glass-ceramic.

2 (Original): A lithium ion secondary battery as defined in claim 1 wherein said thin film solid electrolyte has thickness of 20 μm or below.

3 (Original): A lithium ion secondary battery as defined in claim 1 wherein said thin film solid electrolyte is formed directly on an electrode material or materials for the positive electrode and/or the negative electrode.

4 (Original): A lithium ion secondary battery as defined in claim 1 wherein said thin film solid electrolyte has lithium ion conductivity of 10^{-5}Scm^{-1} or over.

5 (Original): A lithium ion secondary battery as defined in claim 1 wherein said thin film solid electrolyte comprises the inorganic substance in an amount of 40 weight % or over.

6 (Currently amended): A lithium ion secondary battery as defined in claim 1 wherein said inorganic substance is $[[a]]$ the lithium ion conductive crystal.

7 (Cancelled)

8 (Currently amended): A lithium ion secondary battery as defined in claim 1 wherein

Application/Control Number: 10/716,117
Examiner: ECHELMEYER, Alix Elizabeth

said inorganic substance is [[a]] the lithium ion conductive glass-ceramic.

9 (Original): A lithium ion secondary battery as defined in claim 1 wherein said inorganic substance is powder of the inorganic substance.

10 (Currently amended): A lithium ion secondary battery as defined in claim 9 wherein said inorganic substance powder is powder of [[a]] the lithium ion conductive glass-ceramic.

11 (Original): A lithium ion secondary battery as defined in claim 9 wherein an average particle diameter of the inorganic substance powder is 1.0 μm or below.

12 (Original): A lithium ion secondary battery as defined in claim 9 wherein said thin film solid electrolyte comprises a lithium ion conductive inorganic substance powder in a polymer medium.

13 (Original): A lithium ion secondary battery as defined in claim 9 wherein said thin film solid electrolyte comprises a lithium inorganic salt and lithium ion conductive glass-ceramic powder in a polymer medium.

14 (Original): A lithium ion secondary battery as defined in claim 3 wherein said thin film solid electrolyte is formed by direct coating on an electrode material or materials for the positive electrode and/or the negative electrode.

15 (Original): A lithium ion secondary battery as defined in claim 3 wherein said thin film solid electrolyte is formed by crystallizing an amorphous layer which is formed by direct coating on an electrode material or materials for the positive electrode and/or the negative electrode.

16 (Original): A lithium ion secondary battery as defined in claim 1 comprising a positive electrode, a negative electrode and a solid electrolyte wherein said positive and/or

Application/Control Number: 10/716,117
Examiner: ECHELMEYER, Alix Elizabeth

negative electrode comprises lithium ion conductive inorganic substance powder.

17 (Original): A lithium ion secondary battery as defined in claim 16 wherein said inorganic substance powder in the positive and/or negative electrode has an average particle diameter of 3 μm or below.

18 (Cancelled)

19 (Cancelled)

20 (Cancelled)